The American Lung Association of California
Natural Resources Defense Council
Planning and Conservation League
Environmental Defense
Union of Concerned Scientists
Coalition For Clean Air
Bluewater Network
Center for Energy Efficiency and Renewable Technologies
Sierra Club California

January 22, 2007

Mr. Robert Sawyer, Ph.D., Chairman
California Air Resources Board
1001 I Street,
Sacramento, CA 95814

Dear Dr. Sawyer:

Re: Early Action Measures -- Medium and Heavy Duty Trucks/Goods Movement

We are writing on behalf of the American Lung Association of California, Natural Resources Defense Council, Planning and Conservation League, Environmental Defense, Union of Concerned Scientists, Coalition For Clean Air, Bluewater Network, and the Center For Energy Efficiency and Renewable Technologies to urge you to enact several early action measures for the medium and heavy-duty diesel sector in order to achieve the goals of reducing greenhouse gases while expediting progress toward reducing public exposure to diesel exhaust and achieving the Board's goal of 85% reduction in diesel risk by 2020. While we understand that CARB has committed substantial staff time and resources and has made important progress in reducing diesel pollution statewide over the past few years, we believe that additional regulatory and incentive programs are still needed. Heavy-duty early action measures would provide immediate health benefits to communities throughout the state by reducing illnesses, hospitalizations, asthma attacks and pre-mature deaths due to diesel exhaust exposure while also contributing to global warming gas reductions and cost savings for engine owners. Furthermore, in addition to reducing standard greenhouse gases, diesel pollution controls also achieve reductions in black carbon, another agent that can speed climate change.

While the Governor's Climate Action Team Report counts a total reduction of 1.2 million metric tons of greenhouse gas emissions from a combination of truck stop anti-idling measures and statewide anti-idling restrictions on diesel vehicles, we believe that more could be done to both ensure the success of these measures and to get additional tons from other measures in the medium and heavy-duty sector. CARB staff should carefully evaluate how it can strengthen and broaden existing heavy-duty rules in light of AB 32 requirements as well as devise new rules and approaches for diesel risk reduction. We

have put together the following list of practical and available measures to reduce greenhouse gas emissions from medium and heavy-duty vehicles for CARB staff consideration. We appreciate the opportunity to comment and look forward to a continued dialogue as these measures are discussed in more detail and as other effective strategies not listed below may materialize.

1) Anti-Idling Requirements

The Climate Action Team report of March 2006 claims that current anti-idling requirements could reduce greenhouse gas emissions by 1 million metric tons of CO2 equivalent by 2010 and 1.2 million metric tons of CO2 equivalent by 2020. However, this assumes that compliance with heavy-duty idling regulations is at 100 percent. CARB's current enforcement program for heavy-duty diesel, with only 18 heavy-duty field enforcement officers for the entire state, is inadequate to ensure that idling regulations are being complied with.

- CARB should implement an idling enforcement program with additional dedicated staff to ensure that the appropriate resources are available to ensure consistent enforcement of the regulation.
- CARB should implement an aggressive outreach program to state and local law enforcement and regional air districts regarding diesel idling to ensure that these entities undertake idling enforcement duties. There should be clear guidelines including applicability of the regulation, how collected fines are distributed, and who has the authority to write tickets for violations.
- Education outreach efforts must also be directed at truckers, including signage and outreach materials in appropriate locations and languages, to ensure that both California truckers and out-of-state truckers are aware of idling limitations.

In addition, CARB should ensure that every diesel control regulation has an anti-idling requirement. Specifically, CARB should strengthen the cargo handling equipment rule at ports by including a new anti-idling requirement backed up by a strong enforcement program to further reduce diesel emissions from this regulation. Thousands of pieces of cargo handling equipment operate at California ports and rail yards, idling much of the time, using roughly one gallon of fuel per hour of idling. Significant fuel savings and therefore greenhouse gas reductions could be accomplished by amending the cargo handling equipment rule to limit idling. Idling should be limited to a maximum of three minutes, except for emergency situations or idling necessary to carry out special functions while a vehicle is stationary such as lifting or pumping.

2) Electrical Power For Sleeper Cabs

In 2005, CARB adopted an amendment to the in-use heavy-duty diesel idling regulation that also restricted idling and regulated the emissions from auxiliary power units used in sleeper cabs. However the regulation did not include any

specific requirements for use of electrical power units or truck stop electrification despite the potential for additional public health benefits and greenhouse gas reductions. CARB should now consider strengthening the sleeper cab rule by including specific requirements that larger truck stops (e.g. those with greater than 10 bays) must provide electric infrastructure including on-board or off-board power on an expedited basis and by providing additional incentives for truck operators to use zero emitting technologies, for example by using battery-electric APS (alternative power systems) or installing on-board chargers/converters to use electric infrastructure at truck stops. Adding electric infrastructure incentives and requirements would achieve additional greenhouse gas reductions and promote the movement to zero emission technologies in the trucking sector.

3) Promote Medium-Duty Hybrid Technology

CARB should adopt a regulation and/or incentive program to take advantage of emerging hybrid-electric technology for medium duty delivery trucks.

Hybrid electric technology is an excellent option to help significantly reduce greenhouse gas emissions from the transportation sector. While passenger hybrids have been on the market for a few years now, hybrid trucks are just beginning to hit the road in meaningful numbers. A focus by CARB on medium-duty hybrid technology could assist in increasing production volume of this cleaner technology.

Independent testing confirmed the following environmental benefits from FedEx's hybrid-electric medium diesel truck (developed with Environmental Defense) compared to their standard baseline truck:

- 75% reduction in smog-causing nitrogen oxides (NOx)
- 90% reduction in particulate matter
- 33% reduction in greenhouse gases emissions

Hybrid trucks are already in revenue service in FedEx fleets in California and other states and operating successfully. FedEx now has almost 100 hybrids on the road in revenue service with 75 new trucks up and running this fall. The first 18 trucks, which have been on the road for close to three years, have been performing as well or better than FedEx's standard trucks with more than a 97% "up time."

4) On-Road Trucks Technology Requirements

CARB should evaluate and enact requirements and incentives for truck owners and operators, starting with larger fleets, to adopt "SmartWay" technology and promote the use of this important emission reduction strategy in California. U.S. EPA's SmartWay program provides a technology package, along with financing opportunities, for highway trucks that combine greenhouse gas emission

reductions with criteria pollutant emission controls. These technologies include idling reduction devices, low rolling resistance tires, and exhaust aftertreatment technology which can reduce particulate matter, nitrogen oxides and greenhouse gas emissions. CARB should include technology requirements in the in-use on-road diesel vehicle regulation currently under development to achieve greenhouse emission reductions from heavy-duty on–road vehicles.

5) Off-road Equipment Electrification Opportunities

Numerous opportunities exist to reduce greenhouse gas emissions from off-road sources through the use of electric equipment and infrastructure including the following.

Transportation Refrigeration Units (TRU's)

As identified in the Climate Action Team Report, TRU's located at warehouses and other distribution locations can utilize the electric grid instead of running a diesel engine to operate refrigeration equipment. ARB should require new TRU's to be equipped with electric standby capability. In addition, facilities where TRU's frequent should be required to install the necessary infrastructure to support TRU electric standby operation. Implementing this strategy can reduce the threat of diesel exhaust to the nearby communities in addition to achieving greenhouse gas reductions.

Airports

The availability of electrically powered Ground Support Equipment (GSE) for airport operations presents a further opportunity for greenhouse gas reductions. The in-use off-road diesel vehicles measure currently under development by CARB provides an opportunity to accelerate adoption of zero emission GSE at airports throughout the state. CARB should include specific provisions in the regulation to require the use of electrically powered equipment where feasible.

In addition to GSE, electric connections should be required at all gates in airports to allow aircraft to plug-in upon arrival, rather than idling their engines.

Construction Sites

CARB should also consider requirements for the use of electric power at urban construction sites in lieu of diesel generators where grid supplied electricity is available.

We would appreciate your careful consideration of our suggestions and request that you provide a response regarding the greenhouse gas reductions available from the various suggestions we are forwarding to you, as well as your plans for further action on these ideas. We look forward to working with you on the early action plan and other AB 32 implementation measures.

Sincerely,

Bonnie Holmes-Gen, American Lung Association of California
Devra Wang, Natural Resources Defense Council
Renee Guerrero, Planning and Conservation League
Rafael Aguilera, Environmental Defense
Don Anair, Union of Concerned Scientists
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cc:

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